

IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Daniel A. Kearl

Confirmation No.:

Application No.: Unknown

Examiner:

Filing Date:

Group Art Unit:

Title: HYBRID THIN FILM/THICK FILM SOLID OXIDE FUEL CELL AND METHOD OF
MANUFACTURING THE SAME

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

This Information Disclosure Statement is submitted:

- ☒ under 37 CFR 1.97(b), or
(Within three months of filing national application; or date of entry of national application; or before
mailing date of first office action on the merits; whichever occurs last)
- ☐ under 37 CFR 1.97(c) together with either a:
☐ Statement under 37 CFR 1.97(e), or
☐ a \$180.00 fee under 37 CFR 1.17(p), or
(After the CFR 1.97 (b) time period, but before final action or notice of allowance, whichever occurs first)
- ☐ under 37 CFR 1.97 (d) together with a:
☐ Statement under 37 CFR 1.97(e)(1) or (2), and
☐ a \$180.00 fee set forth in 37 CFR 1.17(p).
(Filed after final action, a notice of allowance, on or before payment of the issue fee)

Please charge to Deposit Account **08-2025** the sum of \$0.00 . At any time during the
pendency of this application, please charge any fees required or credit any overpayment to Deposit
Account **08-2025** pursuant to 37 CFR 1.25.

☒ Applicant(s) submit herewith Form PTO 1449 - Information Disclosure Statement together with
any required copies of patents, publications or other information of which applicant(s) are aware, which
applicant(s) believe(s) may be material to the examination of this application and for which there may be
a duty to disclose in accordance with 37 CFR 1.56.

☐ A concise explanation of the relevance of foreign language patents, foreign language publications
and other foreign language information listed on PTO Form 1449, as presently understood by the
individual(s) designated in 37 CFR 1.56 (c) most knowledgeable about the content is given on the
attached sheet, or where a foreign language patent is cited in a search report or other action by a
foreign patent office in a counterpart foreign application, an English language version of the search
report or action which indicates the degree of relevance found by the foreign office is listed on form PTO
1449 and is enclosed herewith.

It is requested that the information disclosed herein be made of record in this application.

"Express Mail" label no. **EV220261195US**

Date of Deposit **October 7, 2003**

I hereby certify that this is being deposited with the
United States Postal Service "Express Mail Post
Office to Addressee" service under 37 CFR 1.10 on
the date indicated above and is addressed to:
Commissioner for Patents, Alexandria, VA
22313-1450.

By

Typed Name: **Julia Church Dierker**

Respectfully submitted,

Daniel A. Kearl

By

Julia Church Dierker

Attorney/Agent for Applicant(s)

Reg. No. **33,368**

Date: **October 7, 2003**

FORM PTO-1449 LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)	ATTY. DOCKET NO. 10007833-9	APPLICATION NO.	CONFIRMATION NO.
	APPLICANT Daniel A. Kearl		
	FILING DATE	GROUP	

REFERENCE DESIGNATION

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	PUBLICATION DATE	NAME	Pages, Columns, Lines Where Relevant Passages or Figures Appear
	1A	4,629,537	Dec 16 1986	Hsu	
	1B	5,190,834	Mar 02 1993	Kendall	
	1C	5,234,722	Aug 10 1993	Ito et al.	
	1D	5,284,698	Feb 08 1994	Marshall et al.	
	1E	5,395,704	Mar 07 1995	Barnett et al.	
	1F	5,518,830	May 21 1996	Worrell et al.	
	1G	5,527,633	Jun 18 1996	Kawasaki et al.	
	1H	5,656,387	Aug 12 1997	Barnett et al.	
	1I	5,741,406	Apr 21 1998	Barnett et al.	
	1J	5,750,013	May 12 1998	Lin	
	1K	5,783,324	Jul 21 1998	Binder et al.	

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	PUBLICATION DATE	NAME OF PATENTEE OR APPLICANT	Pages/Columns/Lines Where Relevant Passages/Figures Appear	Check if Translation attached
	1L	DE1922970	04 Dec 1969	Westinghouse		
	1M	EP 516417A1	02 Dec 1992	Mitsubishi		
	1N	WO94/22178	29 Sep 1994	Kendall		
	1O	WO97/30485	21 Aug 1997	Greiner		
	1P	WO/00/45457	03 Aug 2000	U of California		

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

	1Q	T. Tsai, et al., "Bias Sputter Deposition of Dense Ytria-Stabilized Zirconia Films on Porous Substrates," J. Electrochem. Soc., Vol. 142, No. 9, September 1995; pp. 3084-3087.
	1R	A. Jankowski, et al., "Testing of Solid-Oxide Fuel Cells for Micro to Macro Power Generation," Lawrence Livermore National Laboratory Preprint No. UCRL-JC-134198, May 1999.
	1S	A-Q. Pham, et al., "Collodial Spray Deposition Technique for the Processing of Thin Film Solid Oxide Fuel Cells, Lawrence Livermore National Laboratory Preprint No. UCRL-JC-135760, August 31.

EXAMINER

DATE CONSIDERED

FORM PTO-1449

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U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	PUBLICATION DATE	NAME	Pages, Columns, Lines Where Relevant Passages or Figures Appear
	2A	5,968,673	Oct 19 1999	Aizawa et al.	
	2B	6,013,386	Jan 11 2000	Lewin et al.	
	2C	6,127,058	Oct 03 2000	Pratt et al.	
	2D	6,139,985	Oct 31 2000	Borglum et al.	
	2E	6,156,448	Dec 05 2000	Greiner	
	2F	6,214,485	Apr 10 2001	Barnett et al.	
	2G	6,232,009	May 15 2001	Batawi	
	2H	2002/0025458	Feb 28 2002	Faville et al.	
	2I	6,479,178	Nov 12 2002	Barnett	
	2J	6,509,113	Jan 21 2003	Keegan	
	2K				

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	PUBLICATION DATE	NAME OF PATENTEE OR APPLICANT	Pages/Columns/Lines Where Relevant Passages/Figures Appear	Check if Translation attached
	2L					
	2M					
	2N					
	2O					
	2P					

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

	2Q	J. Will, et al., "Fabrication of thin electrolytes for second-generation solid oxide fuel cells," Solid State Ionics, 131 (2000); pp. 79-96.
	2R	P. Charpentier, et al., "Preparation of thin film SOFCs working at reduced temperature," Solid State Ionics, 135 (2000); pp. 373-380.
	2S	

EXAMINER

DATE CONSIDERED